

**APS COMMITTEE ANNUAL REPORT
2016**

**COMMITTEE:
EDUCATION**

COMMITTEE CHARGE

The membership of the Committee on Education consists of twelve members. Nine members are appointed by the President-Elect to staggered three-year terms while the Chair, Past-Chair and Chair-Elect from the Forum on Education serves as statutory members of the Committee. The President-Elect appoints the Chairperson from among the members. The Committee is responsible for advising the Society on matters pertaining to physics education at all levels including K-12, undergraduate, graduate, and beyond. The committee implements programs, suggests studies, and provides oversight for programs that improve physics learning.

CURRENT COMMITTEE MEMBERS:

Chair: **Carlos A Bertulani**
Texas A&M Univ, Commerce

Member: **Lynwood Randolph**
Les Associates, Inc

Member: **Courtney Lannert**
Smith College

Member: **Maria C Simani**
Univ of California - Riverside

Member: **Michael Jackson**
Millersville Univ

Member: **Laura Henriques**
Cal State Univ- Long Beach

Member: **Juan Diaz**
Mount Aloysius College

FED Past Chair to COE: **Randall Knight**
Cal Poly - San Luis Obispo

Member: **Beth A Thacker**
Texas Tech Univ

FED Chair to COE: **Tim J Stelzer**
Univ of Illinois - Urbana

Member: **Vashti Sawtelle**
Michigan State Univ

FED Chair-Elect to COE: **John C Stewart**
West Virginia Univ

SUMMARY OF MEETINGS AND ACTIVITIES IN 2015:

The committee's primary focus this year was a proposal on Best Practices for Undergraduate Physics Programs (BPUPP). Some STEM disciplines have a history of certification or accreditation of degree programs, administered by professional organizations. In physics, individual colleges and universities have assumed independent responsibility for the content of their undergraduate degree programs. A guide for the self-assessment of undergraduate physics programs is needed that is founded on documented best practices and linked to measurable outcomes. The guide should provide a physics-community-based resource to assist programs in developing a culture of continuous self-improvement, in keeping with their individual mission, context, and institutional type. It should help departments assess their curricula, pedagogy, advising, mentoring, recruitment and retention, research and internship opportunities, diversity, scientific skill development, career/workforce preparation, staffing, resources, and faculty professional development. The COE has created a task force to prepare a plan for ongoing review and improvement of this guide and taking it to the APS council.

The committee also completed these actions:

- One face-to-face meeting on March 4 at the APS headquarters, College Park, MD and another on October 15 in Denver, Colorado. One Winter teleconference meeting on January 14, and another in the Summer on July 8. COE subcommittees have carried out many independent conference calls.
- Selected 2016 winners of the Award for Improving Undergraduate Physics Education
- Drafted a comprehensive document on the COE priorities
- Endorsed initiatives from the Education Policy Group and the Panel of Public Affairs (POPA)
- Conducted an extensive study and preparation of template documents to pass over to the Task Force on Best Practices for Undergraduate Physics Programs (BPUPP)
- Worked on initiatives for the further development of the APS Bridge Program, including future conferences and the creation of mini-grants
- Approved the new Education Policy Committee bylaws, including its membership.

The Committee on Education Policy Committee had these additional accomplishments:

- Worked on the bylaws of the APS Education Policy Committee (EPC). The EPC has similar goals as its predecessor, the Education Policy Group. But the EPC is now a sub-committee of the COE.
- Participated in the analysis of the survey conducted by Panel of Public Affairs (POPA) on recruiting teachers in high needs STEM areas.
- Worked on hiring an APS Fellow in Dept. of Education.
- Worked on addressing public funding for higher education as an input to POPA
- Elected the new members of the EPC for 2017, subsequently approved by the COE

The COE is working on new actions:

- Developing a feedback to institutions in connection to the COE Award for Improving Undergraduate Physics Education
- The COE has taken the responsibility to elect members of the committee for the APS award of faculty research in an undergraduate institution.
- Participation of some of its members on the BPUPP task force have been approved and the task force will soon start working on it.
- Promoting/advertising educational issues via the FEd newsletter, in the Education Corner of APS News, and the Back Page article in the APS News.